vs. 27.0%) and antispasmodics (24.7% vs. 15.9%) than those initiating with a non-oral DMT (all p<0.001). A higher proportion of non-oral initiators had an MS-related inpatient admission (8.8% vs. 5.7%, p<0.001), were prescribed oral corticosteroids (38.2% vs. 33.3%) and had a diagnosis of non-neuropathic pain (52.1% vs. 47.8%), headache (30.2% vs. 26.3%) and neuropathic pain (18.6% vs. 14.7%) than oral initiators (all p<0.05). **CONCLUSIONS:** This study showed that despite being widely available for only a short period of time relative to injected and infused DMTs, oral formulations have captured half the market among treatment-naïve MS patients. Channeling could be influenced by age, concomitant medication use and co-morbid disease.

PND75

SLEEP MEDICATION USERS AND THEIR CHARACTERISTICS

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OBJECTIVES: Sleep deprivation and disturbances can result in reduced quality of life, lowered productivity and impaired daytime functioning leading to increased errors & accidents. Use of sleep aids to treat insomnia is fairly common among the general population and analyzing the factors predicting the use of sleep medication would help us develop better treatment programs for those affected with this problem. To investigate the relationship among age, gender, ethnicity, employment status, perceived health status and other aspects related to the use of sleep medication in the United States population. **METHODS:** This was a retrospective, cross-sectional study using data from the 2010 National Ambulatory Medical Care Survey (NAMCS), a nationally representative data of US population. The study population included all respondents over the age of 18. A multiple logistic regression model was built to analyze odds of reporting use of prescription or non-prescription sleep medication. The statistical package SAS version 9.1 [SAS institute, Cary, NC.] was used for analysis. **RESULTS:** Approximately one tenth of the population reported the use of sleep medications. The odds of reporting use of sleep medication were significantly lower among minority races (OR=0.549, 95% CI= 0.303-0.995) compared with African-American. The odds of sleep medication use were significantly higher among age groups of 24-44 years and 44-64 years as compared with 18-24 years (OR=2.133, 95% CI= 1.501-3.030 and OR=2.888, 95% CI= 1.983-4.206, respectively), non-Hispanics (OR=1.678, 95% CI= 1.178-2.391), smokers (OR=1.243 95% CI=1.056-1.464), public insured and uninsured compared with private insured(OR=1.338, 95% CI=1.102-1.625 and OR=1.326, 95% CI=1.025-1.717 respectively), respondents with COPD (OR=1.320, 95% CI=1.009-1.729) and depression (OR=4.345, 95%CI=3.745-5.029). **CONCLUSIONS:** Differences in sleep medication use were seen among specific sub-populations. Further research on why such differences exist is necessary. The factors identified in this study should be further investigated to identify vulnerable populations to investigate underlying causes of sleep disorders.

PND76

A DESCRIPTIVE ANALYSIS OF TIME TO FIRST TREATMENT WITH DISEASE-MODIFYING DRUGS (DMDS) IN NEWLY DIAGNOSED PATIENTS WITH MULTIPLE SCLEROSIS (MS)

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OBJECTIVES: Examine time to first DMD prescription in newly diagnosed MS patients. **METHODS:** This retrospective database analysis of newly diagnosed MS patients was conducted using a national managed care database. Patients 18–64 years, with first MS claim (ICD-9-CM: 340.xx) from 1/1/2008–12/31/2011 (index date), continuous eligibility for 6 months pre- and 24 months post-index, who had ≥1 DMD claim during the 24-month post-index period were included. Patients who had evidence of DMD use prior to first MS claim were excluded. Categorical and binary variables were summarized using frequencies and percentages. Continuous variables were summarized using means, SDs and medians. **RESULTS:** Total of 7993 MS patients met study inclusion criteria. Mean age was 42.7 years (SD=10.2); 75.5% were female. Patients were most likely to be from the Midwest (32.6%) or Northeast (30.3%) regions, which reflects sampling for the national database used in this study. Average time from first MS diagnosis to first DMD claim was 150 days (SD=181), with median time of 64 days. Examining time to first DMD treatment showed that 28.2% received their first DMD in <30 days, 48.1% in <60 days, 58.7% in <90 days and 71.6% in <180 days. Over one-quarter of patients (28.4%) did not have their first DMD claim for ≥180 days following first MS diagnosis. A secondary analysis examined time to first DMD claim for newly treated patients with any available data in the post-index period (n=9359). Mean and median times to DMD treatment for this broader population were 295.5 (SD=408.4) and 89 days, respectively. **CONCLUSIONS:** This study demonstrates that many patients with newly diagnosed MS have a delay before having their first DMD claim, with 28.4% waiting to start therapy for ≥6 months. Data suggest early initiation of DMD therapy following a diagnosis of relapsing MS is important for optimizing MS management.

PND77

TREATMENT PATTERNS OF MONOTHERAPY VERSUS COMBINATION ANTIEPILEPTIC DRUG THERAPY IN PATIENTS WITH EPILEPSY

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OBJECTIVES: Monotherapy with antiepileptic drugs (AEDs) is the preferred initial management approach in patients with epilepsy. Differences in treatment patterns were assessed across monotherapy and combination therapy users. **METHODS:** Texas Medicaid medical and prescription claims from January 1, 2007 - October 31, 2010 were extracted for adults (18-63 years) diagnosed with epilepsy. The index date was the first date of AED use with no previous use in the 6-month pre-index period. Patients were followed for 12 months. Combination therapy was defined as the use of ≥2 AEDs with an overlap of at least 14 days following index date. Treatment patterns consisting of additions, switches, and discontinuations in the 1-year follow up period were assessed for patients on mono vs. combination therapy. Logistic regression was used to evaluate the association of mono vs. combination therapy and types of treatment patterns while controlling for demographics, chronic disease score (CDS), mental comorbidities, and type of epilepsy. SAS 9.3 was used for statistical analyses. **RESULTS:** Patients with epilepsy (n=4,163) had a mean age of 37.8±13.3 years, were primarily female (57.8%), White (41.5%), on monotherapy (87.6%), with a mean CDS of 1.2±3.0. Of the patients on monotherapy (n=3,647) 4.3% added, 14.2% switched, and 46.7% discontinued the index AED. Of the patients on combination therapy (n=516), 5.6% added, 7.9% switched, and 38.6% discontinued at least one of the index AEDs. Logistic regression showed that the likelihood of change in treatment patterns was significantly higher in the monotherapy group (odds ratio=1.7; confidence interval=1.401-2.039; p<0.0001) as compared to the combination therapy group, while controlling for covariates. **CONCLUSIONS:** Patients on monotherapy were more likely to change treatment patterns as compared to those on combination therapy in Texas Medicaid. Future research assessing the benefits of combination therapy over monotherapy is needed.

SYSTEMIC DISORDERS/CONDITIONS – Clinical Outcomes Studies

PSY1

RISK OF GLUCOCORTICOID-RELATED ADVERSE EVENTS IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOUS: FINDINGS FROM A 12-YEAR LONGITUDINAL FOLLOW-UP STUDY IN TAIWAN

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OBJECTIVES: Despite clinical efficacy of anti-inflammatory and immunosuppressive actions in treating systemic lupus erythematous (SLE), numerous adverse events (AEs) have been observed in glucocorticoid (GC) use. To date, no national, population-based studies have been conducted in Asia to understand the long-term impact of GC use in SLE patients. The aim of our study is to examine the AEs associated with GC use among an ethnic Chinese SLE cohort. **METHODS:** Our study subjects were newly diagnosed SLE patients aged 18 and older who received at least 1 prescription of systemic steroid between January 1, 2001 and December 31, 2012. The earliest prescription date of systemic GC of each subject was defined as the index date. For each subject, we calculated average prednisolone-equivalent dose and medication possession ratio (MPR) of GC use every 90 days each patient after index date. Generalized estimating equations (GEE) adjusted for propensity score were applied to examine the association between longitudinal GC use and risks of pre-specified AEs (musculoskeletal, gastrointestinal, ophthalmologic, infectious, cardiovascular, neuropsychiatric, metabolic, and dermatologic diseases). **RESULTS:** We identified 11,288 SLE patients from Taiwan's National Health Insurance Research Database (NHIRD) (mean follow-up: 6.28 years). Multivariate GEE models showed that higher dose and higher MPR of GC use were associated with increased risk of osteonecrosis (adjusted odds ratio (aOR) ranged from 2.87 to 9.09). Similar results were found regarding the risk of osteoporosis (aOR ranged from1.71 to 3.67), bacterial infection (aOR ranged from 2.12 to 3.89), Cushingoid syndrome (aOR ranged from 6.51 to 62.03) and sleep disorder (aOR ranged from 1.42 to 3.59). **CONCLUSIONS:** Our empirical analysis found that dose and intensity of GC use were both associated with higher risks of AEs. To our knowledge, this is the first study to document longitudinal use of GC and associated AEs among a nationwide Asian SLE cohort.

PSY2

A REVIEW OF INTRAOPERATIVE INTERVENTIONS TO PREVENT STAPLE LINE LEAKS AND BLEEDS DURING BARIATRIC SURGICAL PROCEDURES

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OBJECTIVES: The objective of this review was to assess the need for intraoperative surgical interventions to prevent bleeding and leaks during the two most common procedures for bariatric surgery, laparoscopic sleeve gastrectomy (LSG) and laparoscopic Roux-en-Y gastric bypass (LRYGB). **METHODS:** A literature search was performed using MEDLINE®, EMBASETM, and Biosis from January 2010 through November 2014. Titles were searched using key words laparoscopic sleeve gastrectomy, sleeve gastrectomy, or gastric bypass and filtered by searching the full citation for staple line, laparoscopic, leak or bleed, and intraoperative or intervention with appropriate truncations. Additional references extending to 2008 were cited by or referenced in manually filtered articles. **RESULTS:** The search yielded 144 titles and abstracts. From these, 11 full articles were reviewed and 6 were included, along with 11 additional articles identified through citations. For LSG, the incidence of intraoperative leaks and bleeds ranged from 1.15-3.93% and 1.08-4.07%, respectively. For LRYGB, leaks occurred in 3.79-8.26% and bleeds in 2.25-3.45% of cases. Lack of standardized leak testing methods makes inter-study comparisons difficult. Bleeds, considered a nuisance during surgery, are treated routinely with sealants or suturing but may be self-limiting and often go unreported. Intraoperative leaks and bleeds are associated with variables in stapler efficacy and influenced by inherent characteristics of the tissue as well as the experience of the surgeon. The use of staple line buttressing, oversewing, and/or tissue sealants appears to be common practice as a precautionary measure but has been criticized as unnecessary and having a negative impact on efficiency factors such as operative time, cost, or length of stay. **CONCLUSIONS:** Widespread use of precautionary measures and underreporting suggest the incidence of intraoperative leaks and bleeds at the staple line may be underestimated. Improvements in stapler design may increase efficiency while reducing the cost of precautionary measures and intraoperative interventions.